XII.—List of the Snakes in the Zoological Museums of Lund and Malmö, with Descriptions of new Species and a new Genus. By NILS ROSÉN, Zool. Inst. Lund.

[Plates XI. & XII.]

At the request of the Director of the Zoological Museum of Lund, Prof. D. Bergendal, I have determined and revised the collections of snakes in that Museum. The specimens not determined belong principally to collections made by Dr. Hj. Möller in Java (1897), by Dr. N. Holst in West Australia (1897), and by Bar. Eggers in Ecuador. Through the kindness of Dr. H. Wallengren I have further had the opportunity of examining some snakes in the Museum of Malmö. I have found five species and one genus not previously described. A description of these and notices respecting some specimens which differ from the typical examples form the subject of this paper. As regards the systematic classification and nomenclature, I have followed G. A. Boulenger, 'Catalogue of the Snakes in the British Museum,' vols. i.—iii. (1893–96). Some snakes were presented by private individuals, without any information as to habitats.

Fam. Typhlopidæ.

- 1. Typhlops braminus, Daud. Java.
- 2. Typhlops bicolor, Ptrs. West Australia.
- Typhlops olivaceus, Gray. West Australia.

Fam. Boidæ.

- 4. Python reticulatus, Schn. Java.
- 5. Python molurus, L.
- Epicrates cenchris, L.
 upper labials.
- 7. Epicrates striatus, Fisch.
- 8. Corallus caninus, L. Maroni (Surinam).

9. Trachyboa gularis, Ptrs., var. multimaculata, nov.

Snout scarcely prominent. Upper head-scales small, convex, keeled. Eye bordered by 2 labials (sixth and seventh) and 11 scales. 25 scales round the upper lip. Four pairs of shields bordering the mental groove. Scales strongly keeled, in 31 rows. Ventrals 146. Anal entire. Subcaudals 29. Brown above, with a dorsal series of large irregular black spots; two series of smaller ones on each side; yellow beneath, with large black spots.

Total length 320 mm.; tail 35.

Ecuador.

A single specimen, belonging to the Museum of Lund,

collected by Eggers, 1892, in Balao (Ecuador).

Cf. Proc. Zool. Soc. of London, 1898, p. 115, where Boulenger describes a specimen from Ecuador differing by having the eye completely surrounded with 14 scales, labials being excluded.

10. Eunectes murinus, L. Brazil.

11. Boa constrictor, L.

Fam. Ilysiidæ.

12. Ilysia scytale, L.

13. Cylindrophis rufus, Laur. Java.

Fam. Xenopeltidæ.

14. Xenopeltis unicolor, Reinw. Sumatra.

Fam. Colubridæ.

Series AGLYPHA.

 Acrochordus javanicus, Hornst. Java.

16. Polyodontophis geminatus, Boie.

Differs from the description in Cat. Snakes in having 8 upper labials, third, fourth, and fifth entering the eye.

Java.

- 17. Tropidonotus ordinatus, L., var. infernalis. Oregon.
- 18. Tropidonotus ordinatus, L., var. sirtalis. Oregon.
- Tropidonotus saurita, L.
 Total length of one specimen 970 mm.; tail 290.
 North America.
- 20. Tropidonotus natrix, L. Sweden.
- 21. Tropidonotus trianguligerus, Boie. Java, Sumatra.
- 22. Tropidonotus piscator, Sehn., type C. Scales sometimes feebly keeled or nearly smooth, reminding one of Tr. Sancti-Johannis (see Boul. Cat. Snakes, i. p. 230). Java.
- 23. Tropidonotus tessellatus, Laur. South Europe.
- 21. Tropidonotus viperinus, Latr. Algiers.
- 25. Tropidonotus Clarkii, B. & G.
- 26. Tropidonotus tigrinus, Boie.
- 27. Tropidonotus vittatus, L. Java.
- 28. Tropidonotus subminiatus, Schleg.

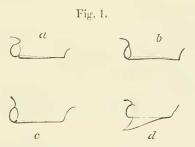
 Some specimens with third and fourth upper labials entering the eye.

 Java.
- 29. Helicops angulatus, L.
- 30. Helicops modestus, Gthr.
- 31. Helicops leopardinus, Schleg.

The last two species differ from the descriptions by not having any hypapophyses in the posterior region of the dorsal column. In H, leopardinus, Schleg. (which is represented in the Lund Museum by a single specimen), the lower surface of the dorsal vertebræ in the posterior region has a lower keel (text-fig. 1, a), without any crest or tubercule projecting

below the condyle. In H. modestus, Gthr. (two specimens in the collections), the lower surface is smooth (fig. 1, b).

In the 'Catalogue of Snakes' Boulenger has laid stress upon the presence or absence of hypapophyses on the posterior dorsal vertebræ, and, so far as I know, he has continued to do so. Among the snakes I have had an opportunity of examining I have, however, found several specimens which differ from species already described only by the presence or absence of the hypapophyses in the posterior region of the dorsal column. That these ought not to be regarded as new species or genera is quite certain, and consequently the hypapophyses are not of such great importance for classification as has been supposed. More extended examination of other species and genera is required.



Vertebrae in the posterior region of the dorsal column.

u. Helicops leopardinus, Schleg.

b. — modestus, 6thr.

c. Tretanorhinus intermedius, sp. n.
d. Chrysopelea ornata, Shaw, type Λ.

32. Tretanorhinus intermedius, sp. n. (Pl. XII. fig. 2)

Without any hypapophyses on the posterior dorsal vertebrae

(text-fig. 1, c).

Nasals separated. Internasals small. Frontal much shorter than the parietals. One loreal, about twice as long as deep. Two preoculars. Two postoculars. Temporals 1+2. Eight upper labials, fourth entering the eye. Five lower labials in contact with the anterior chin-shields. Posterior chin-shields separated from each other by scales. Scales in 21 rows, striated, with short but strong keels. Ventrals 142. Anal divided. Subcaudals 56. Dark brown above, with a dorsal series of irregular black spots, sometimes confluent. An indistinct yellow, dark-edged, lateral streak.

Yellow beneath, with brown dots, anteriorly dark, with an indistinct black median line.

Total length 520 mm.; tai 120. Central America.

Elapoides fuscus, Boie.
 Nasal entire.
 Java.

- 34. Lycodon aulicus, L.
- 35. Lycodon subcinctus, Boie. Java.
- 36. Zamenis korros, Schleg. Java.
- 37. Zamenis constrictor, R.

 Eight upper labials, fourth and fifth entering the eye.

 North America.
- 38. Zamenis flagelliformis, Laur. South Carolina.
- 39. Zamenis gemonensis, Laur., var. asianus. Entirely black.
- 40. Zamenis algirus, Jan. Algiers.
- 41. Zamenis hippocrepis, L. Algiers.
- 42. Drymobius bifossatus, Raddi.

Loreal longer than deep. Frontal shorter than the parietals. Total length 1720 mm.; tail 500.

43. Drymobius Boddaertii, Sentz.

44. Coluber fasciatus, sp. 11. (Pl. XI. fig. 2.)

Rostral broader than deep. Internasals much shorter than the præfrontals. Præfrontals large. Frontal once and two thirds as long as broad, much longer than its distance from the end of the snout. Nasal entire. Loreal a little longer than deep. One præocular. Two postoculars. Temporals 2+2. Eight upper labials, third, fourth, and fifth entering the eye. Five lower labials in contact with the anterior chin-shields. Posterior chin-shields in contact anteriorly.

Scales smooth, in 17 rows, with two apical pits. Ventrals without or with a rather indistinct lateral keel, 179. Anal divided. Subcaudals 100, in two rows. Dark brown above, with narrow indistinct white (in spirit) cross-bands, extending on the ventrals. These bands are caused by large white edges to the scales. Lighter beneath. Head with white streaks and spots.

Total length 305 mm.; tail 30.

Ecuador.

A single specimen, belonging to the Museum of Lund, collected by Eggers in Balao (Ecuador), 1892.

45. Coluber lectus, B. & G. North America.

46. Coluber obsoletus, Say.
Scales rather feebly keeled.
North America.

47. Coluber oxycephalus, Boie. Java.

48. Coluber melanurus, Schleg. Java.

49. Herpetodryas carinatus, L.

50. Dendrophis pictus, Boic. Java.

51. Dendrophis formosus, Boie. Java.

52. Dendrelaphis subocularis, Blgr.

A single specimen, ventrals 160.

53. Dendrelaphis caudolineatus, Gray.

Java.

Five specimens, collected by Dr. Hj. Möller, 1897 The genus Dendrelaphis had not previously been found in Java.

- 54. Gastropyxis smaragdina, Schleg.
- 55. Leptophis occidentalis, Gthr.
- 56. Dromicus antillensis, Schleg. West Indies.

- 57. Dromicus rufiventris, D. & B. West Indies.
- 58. Liophis albiventris, Jan, type A. Ecuador.
- 59. Liophis pacilogyrus, Wied. Argentine.
- 60. Liophis typhlus, L. Brazil.
- 61. Liophis epinephelus, Cope.
- 62. Liophis reginæ, L. Brazil.
- 63. Liophis parvifrons, Cope.
- 64. Xenodon Merremi, Wagl. Brazil.
- 65. Heterodon platyrhinus, Latr.

Two specimens have scales very feebly keeled, but do not differ in other structural characters.

United States of America.

- 66. Aporophis lineatus, L.
- 67. Rhadinæa anomala, Gthr. Argentine.
- 68. Rhadinæa cobella, L.
- 69. Rhadinæa fusca, Cope.
- 70. Urotheca luteristriga, Berth. Ecuador.
- 71. Dimades plicatilis, L.
- 72. Coronella austriaca, Laur. Europe.
- 73. Coronella triangulum, Daud., typo A. North America.
- 74. Cemophora coccinea, Blumenb.

 The supraoculars fused with the frontal.

- 75. Simotes octolineatus, Schn. Java.
- 76. Contia vernalis, Harl. Total length 580 mm. North America.
- 77. Homalosoma lutrix, L.
- 78. Petalognathus nebulatus, L. Brazil.
- 79. Carphophis amænus, Say. North America.
- 80. Calamaria Linnæi, Boie. Java.

Series OPISTHOGLYPHA.

- 81. Hypsirhina enhydris, Schn., type A. East Indies.
- 82. Homalopsis buccata, L.

Java (one specimen with a length of 840 mm. from the snout to the anal; tail stumped); East Indies.

- 83. Cerberus rhynchops, Schn.
- 84. Gerardia Prevostiana, Eyd. & Gerv.
- 85. Eteirodipsas colubrina, Schleg.

Internasals shorter than the præfrontals. Three præoculars, upper largest and reaching the frontal. Three suboculars; three postoculars. Temporals 2+2. Eight upper labials. Scales in 27 rows. Ventrals 213. Anal divided. Subcaudals 80, the anterior single. Brown above, yellow beneath; with irregular black or dark brown spots; the posterior ventrals with dark brown or black dots.

Total length 710 mm.; tail 130.

Madagasear.

A single specimen belonging to the Museum of Lund.

- 86. Trimorphodou biscutatus, D. & B.
- 87. Lycognathus cervinus, Laur.
- 88. Dipsadomorphus multimaculatus, Boie. Java.

- 89. Leptodira personata, Cope.
- 90. Leptodira albofusca, Lacép.
- 91. Leptodira annulata, L.
- 92. Oxyrhopus petolarius, L.
- 93. Oxyrhopus trigeminus, D. & B.
- 94. Oxyrhopus clælia, Daud.
- 95. Thamnodynastes Nattereri, Mik. Subcaudals 80.
 Brazil.
- 96. Thamnodynastes punctatissimus, Wagl.
- 97. Tomodon ocellatus, D. & B.
- 98. Philodryas æstivus, Schleg. Total length 1300 mm.
- 99. Philodryas viridissimus, L.
- 100. Philodryas Olfersii, Licht.
- 101. Philodryas Schotti, Schleg.
- 102. Trimerorhinus rhombeatus, L.
- 103. Cælopeltis monspessulana, Herm. Algiers.

Anisodon, gen. nov.

Hypapophyses throughout the vertebral column, represented on the posterior dorsal vertebræ by a well-developed crest, projecting below the condyle. Solid maxillary teeth anteriorly small, increasing in size and followed by an interspace, after which the teeth are very small; the last two large and grooved, situated below the posterior border of the eye. Mandibular teeth unequal, the anterior largest and separated from the rest by a short interspace. Head distinct from neck. Snout pointed. Eye rather large. Body cylindrical. Tail moderate. Scales smooth, in 17 rows. Subcaudals in 2 rows.

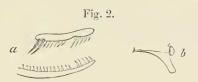
Java.

104. Anisodon Lilljeborgi, sp. n.* (Pl. XI. fig. 3.)

Rostral much broader than deep. Internasals as long as broad, shorter than the prafrontals. Nasal entire. Loreal

* I take the liberty of naming this snake after the celebrated Swedish zoologist Prof. W. Lilljeborg, who has determined the old collections of snakes in the Museum of Lund.

irregular. Frontal nearly twice as long as broad, longer than its distance from the rostral, nearly as long as the parietals. One præocular. Two postoculars. Supraocular large. Temporals 2+2. Eight upper labials; second and third reaching the præocular; third, fourth, and fifth entering the eye. Three lower labials in contact with the anterior chin-shields.



Anisodon Lilljeborgi, gen. et sp. n.

a. Maxillary and anterior part of the mandible.b. Hypapophysis in the posterior region.

Scales smooth, in 17 rows. Ventrals 156-159. Anal entire.

Scales smooth, in 17 rows. Ventrals 156-159. Anal entire. Subcaudals 43-50, in two rows. Greyish brown; a dorsal series of lighter spots, edged with black, indistinct posteriorly. Yellowish beneath, with irregular dark spots. Head with lighter and darker irregular streaks and dots. Along the upper labials a white streak, edged with black.

Total length 490 mm.; tail 95.

Java.

Two specimens, belonging to the Museum of Lund, collected by Dr. Hj. Möller in Tjibodas (Java), 1897.

105. Macroprotodon cucullatus, Geoffr. Algiers.

106. Dryophis xanthozona, Boie.

Java.

In the 'Catalogue of Snakes,' vol. iii. (1896), Boulenger says:—"Anal entire (rarely divided)." Of the ten specimens which are preserved in the collections no less than nine have the anal divided.

107. Dryophis prasinus, Boie. Java.

108. Oxybelis acuminatus, Wied.

109. Chrysopelea ornata, Shaw, type A. (Pl. XI. fig. 1; and text-fig. 1, d, p. 171.)

Hypapophyses present throughout the vertebral column,

represented on the posterior dorsal vertebræ by a well-developed crest, projecting below the condyle. Ventrals 222. Subcaudals 131.

Sumatra.

A single specimen, belonging to the Museum of Malmö, collected by C. Richter, 1895.

- 110. Chrysopelea ornata, Shaw, type D.
- 111. Erythrolamprus Æsculapii, L. South America.
- 112. Homalocranium melanocephalum, L. Ecuador.

Series PROTEROGLYPHA.

113. Hydrus platurus, L.

Coast of Java.

The two specimens belonging to the Museum of Lund have respectively 51 and 59 scales round the body. In the 'Cat. of Snakes' Boulenger states the scale-rows of this snake to be 45 to 47. The two specimens also differ from the description in 'Cat. Snakes' by having the frontal shorter than the parietals. In coloration they agree with the type E.

114. Hydrophis gracilis, Shaw.

115. Enhydris Hardwickii, Gray. (Pl. XII. fig. 1.)

One specimen, with six very feebly grooved small maxillary teeth.

116. Distira longissima, sp. n.

Head moderate. Body much elongated. Rostral about as broad as deep. Nasals shorter than the frontal, more than twice as long as the suture between the praefrontals. Frontal a little more than twice as long as broad, as long as its distance from the end of the snout, shorter than the parietals. One præocular. Two postoculars. Two anterior temporals. Eight upper labials; third, fourth, and fifth entering the eye, second largest and reaching the præfrontal. Two pairs of chin-shields; posterior a little longer than the anterior, in contact anteriorly. Scales smooth, imbricate, 31 round the neck, 35 round the middle of the body. Ventrals 320, smooth. Greyish green, with dark cross-bands, broadest on the middle, narrowing on the sides.

Total length 1650 mm.; tail 120.

Habitat unknown. A single specimen belonging to the Museum of Lund.

117. Aipysurus australis, Sauw.

Australia.

Ventrals 167-168.

118. Platurus colubrinus, Schn.

119. Denisonia superba, Gthr.

Australia.

One specimen differs from the description of the genus *Denisonia* in having the poison-fangs followed by 7 small solid teeth. Boulenger states (Cat. Snakes) the number to be 3 to 5.

120. Denisonia Gouldi, Gray.

West Australia.

121. Denisonia fasciata, sp. n.

Eye moderate. Rostral broader than deep, visible from above. Internasals shorter than the præfrontals, broader than long. Frontal once and one fourth to once and one third as long as broad, shorter than its distance from the rostral, shorter than the parietals, much broader than the supraoculars. Nasal entire, narrowly in contact with the præocular. Two postoculars, upper in contact with the parietal. Six upper labials, second and third in contact with the præocular, third and fourth entering the eye. Temporals 2+1 or 2, lower anterior wedged in between the fifth and sixth upper labials. Three lower labials in contact with the anterior chin-shields. The posterior chin-shields separated by scales, about as long as the anterior. Scales in 17 rows. Ventrals 153–165. Anal entire. Subcaudals 28–31. Yellow (? in spirit), with large indistinct brown spots or cross-bands.

Total length 410 mm.; tail 47.

West Australia.

Two specimens, belonging to the Museum of Lund, collected by Dr. N. Holst, 1897.

Seems to be closely allied to D. maculata, Stdr.

122. Rhynchelaps Bertholdi, Jan.

West Australia.

123. Rhynchelaps fasciolatus, Gthr. West Australia.

124. Bungarus fasciatus, Schn. Java.

125. Bungarus candidus, L.

Java.

Of the eight specimens in the collections there are seven with dark annuli on the tail (not cross-bands). Frontal shorter than its distance from the rostral. The coloration on the head a little variable.

126. Naia melanoleuca, Hallow., type A.Gaboon.Some scales with white dots and edges.

127. Naia tripudians, Merr., var. leucodira.Java.One black specimen.

128. Doliophis bivirgatus, Boie, type C. Java.

129. Doliophis intestinalis, Laur., f. typica. Java.

130. Elaps fulvius, L., type A. North America.

131. Elaps Spixii, Wagl. Brazil.

132. Elaps frontalis, D. & B. Argentine.

133. Elaps lemniscatus, L.

Fam. Amblycephalidæ.

134. Dipsas infrenalis, sp. n.

Maxillary with 12 teeth. Rostral as deep as broad. Internasals broader than long. Præfrontals much longer than the internasals, entering the eye. Nasal entire. One præocular. Two postoculars. No loreal. Frontal small, broad anteriorly, much shorter than the parietals. Temporals 1+2, very small. Nine upper labials, third, fourth, and fifth entering the eye. First lower labial in contact with its fellow behind the symphysial. Two pairs of chin-shields, the posterior largest. Five lower labials in contact with the anterior chin-shields. Scales smooth, in 15 rows, vertebral row enlarged. Ventrals 193. Anal entire. Subcaudals 99,

in two rows. Colour? (in spirit), with dark cross-bands, extending on the ventrals.

Total length 390 mm.; tail 100.

A single specimen, belonging to the Museum of Lund. Habitat unknown.

Fam. Viperidæ.

135. Vipera berus, L. Europe.

136. Cerastes cornutus, Forsk. Algiers.

137. Ancistrodon rhodostoma, Boie. Java.

138. Lachesis lanceolatus, Lacép.

West Indies.

One specimen with small shields on the anterior part of the head.

139. Lachesis atrox, L. Maroni.

140. Lachesis alternatus, D. & B.
One specimen with a **X**-shaped light marking.

141. Crotalus terrificus, Laur.

Well-developed shields between the internasals and the præfrontals.

142. Crotalus horridus, L.

EXPLANATION OF THE PLATES.

PLATE XI.

Fig. 1. Chrysopelea ornata, Shaw, type A. Fig. 2. Coluber fasciatus, sp. n.

Fig. 3. Anisodon Lilljeborgi, gen. et sp. n.

PLATE XII.

Fig. 1. Enhydris Hardwickii, Gray. Fig. 2. Tretanorhinus intermedius, sp. n.

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